

Remarks

The applicants have carefully considered the Office action mailed August 10, 2007. In the Office action, independent claims 1, 8, 16, and 23 were rejected as anticipated by D’Inverno et al. (EP 1 313 012) (“D’Inverno”). In view of the forgoing amendments and the following remarks, reconsideration of the application is respectfully requested.

As an initial matter, the forgoing amendments to claim 27 address the objections noted in the Office action.

Claim 1 recites a method comprising, *inter alia*, replacing a portion of a managed application program interface with native code supporting one or more processor instructions to generate an optimized managed application program interface and compiling the optimized managed application program interface including the native code using a compiler of a managed runtime environment. D’Inverno fails to describe or suggest the forgoing recitations of claim 1.

D’Inverno is directed to a JAVA DSP acceleration by byte-code optimization. In particular, D’Inverno describes a system in which an iteration sequence in a sequence of instructions is replaced with a proprietary code sequence. The modified sequence of instructions is then processed by executing the proprietary code sequence on special acceleration circuitry and executing the remaining instructions interpretively using a JAVA virtual machine. (D’Inverno, Abstract). In other words, D’Inverno specifies that the inserted proprietary code sequence is not handled by the JAVA virtual machine. In contrast, the native code inserted in the optimized managed application, as recited in claim 1, compiled using a compiler of the managed runtime environment (e.g., a just in time compiler of a JAVA managed runtime environment). It is well settled that “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently

described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051 (Fed. Cir. 1987). Thus, because D’Inverno fails to describe or suggest at least the forgoing recitations of claim 1, claim 1 and all claims depending therefrom are patentable over D’Inverno.

Further, one of ordinary skill in the art would not have been motivated to modify the teachings of D’Inverno to arrive at the invention recited in claim 1. D’Inverno’s stated purpose is to replace iterative sequences in sequences of instructions and to cause them to execute on special acceleration circuitry. (D’Inverno, Abstract). Modifying D’Inverno to cause the inserted sequences of instructions to be executed in the managed runtime environment would defeat the purpose of D’Inverno. Therefore, for at least the forgoing reason, claim 1 and all claims depending therefrom are not obvious in view of D’Inverno.

Claim 8 recites machine readable instructions, which when executed, cause a machine to, *inter alia*, replace a portion of a managed application program interface with native code supporting one or more processor instructions to generate an optimized managed application program interface and compile the optimized managed application program interface including the native code using a compiler of a managed runtime environment. As described in conjunction with claim 1, D’Inverno does not describe or suggest replacing a portion of a managed application program interface with native code supporting one or more processor instructions to generate an optimized managed application program interface and compiling the optimized managed application program interface including the native code using a compiler of a managed runtime environment. Therefore, for at least the forgoing reasons, claim 8 and all claims depending therefrom are patentable over D’Inverno.

Claim 16 recites an apparatus comprising a processor to, *inter alia*, replace a portion of a managed application program interface with native code supporting one or more

processor instructions to generate an optimized managed application program interface, and a compiler to compile the optimized managed application program interface including the native code using a compiler of a managed runtime environment. As described in conjunction with claim 1, D'Inverno does not describe or suggest replacing a portion of a managed application program interface with native code supporting one or more processor instructions to generate an optimized managed application program interface and compiling the optimized managed application program interface including the native code using a compiler of a managed runtime environment. Therefore, for at least the forgoing reasons, claim 16 and all claims depending therefrom are patentable over D'Inverno.

Claim 23 recites a processor system comprising, *inter alia*, a processor, *inter alia*, replace a portion of one or more managed application program interfaces with native code supporting one or more processor instructions to generate one or more optimized managed application program interfaces and to compile the one or more optimized managed application program interfaces including the native code using a compiler of a managed runtime environment. As described in conjunction with claim 1, D'Inverno does not describe or suggest replacing a portion of a managed application program interface with native code supporting one or more processor instructions to generate an optimized managed application program interface and compiling the optimized managed application program interface including the native code using a compiler of a managed runtime environment. Therefore, for at least the forgoing reasons, claim 16 and all claims depending therefrom are patentable over D'Inverno.

Conclusion

The applicants respectfully submit that all claims are in condition for allowance. Reconsideration of the application and allowance thereof are respectfully requested. If there is any matter that the examiner would like to discuss, the examiner is invited to contact the undersigned representative at the telephone number set forth below.

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